

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electromagnetic relay comprising:
a control unit configured to control the electromagnetic relay, wherein the control unit generates a pulse-width modulation signal according to at least one of a voltage supply and a current supply,
at least one contact, controlled by the control unit, wherein the control unit is configured to control the at least one contact according to any one of the voltage supply and current supply, the control unit having a calculator for changing a cyclic ratio value of a pulse duration modulator for supplying a contacting voltage or a maintaining voltage[[:]]
wherein the pulse duration modulator is configured to modulate the pulse-width modulation signal according to:
at least one of the voltage supply and current supply and
the contacting voltage which is sufficient to close the at least one
contact of the electromagnetic relay;
wherein the pulse duration modulator is configured to modulate the pulse-width modulation signal according to:
at least one of the voltage supply and current supply and
the maintaining voltage which is sufficient to maintain closure of the at
least one contact;
wherein the control unit is configured to provide the contacting voltage to the electromagnetic relay, the contacting voltage sufficient to close the at least one contact; and
wherein the control unit is configured to provide, according to at least one of the voltage supply and the current supply, the maintaining voltage sufficient to maintain closure of the at least one contact.
2. (Currently Amended) A control unit for an electromagnetic relay coupled to a voltage source comprising:

a power supply-adapting module for adapting the power supply of the relay, the power supply-adapting module having a calculator for changing a cyclic ratio value of a pulse duration modulator for supplying a contacting voltage or a maintaining voltage;

wherein the control unit is configured to control the power supply-adapting module;

wherein the control unit generates a pulse-width modulation signal according to at least one of a voltage supply and a current supply; and

at least one contact controlled by the control unit;

wherein the control unit is configured to provide the contacting voltage sufficient to close the contact of the relay and the maintaining voltage sufficient to maintain closure of the at least one contact; and

wherein the ~~control unit~~ pulse-width modulation signal is modulated according to:

at least one of the voltage supply and the current supply and ~~wherein the control unit is configured to provide the maintaining voltage sufficient to maintain closure of the at least one contact~~

the contacting voltage which is sufficient to close the at least one contact of the electromagnetic relay;

wherein the pulse-width modulation signal is modulated according to:

at least one of the voltage supply and the current supply and the maintaining voltage which is sufficient to maintain closure of the at least one contact.

3. (Previously Presented) The control unit of claim 2, wherein the control unit comprises a controller to control the duration of operation of the power supply-adapting module during closure of the contacts.

4. (Previously Presented) The control unit of claim 2, wherein the control unit comprises a module for detecting micro power cuts.

5. (Previously Presented) The control unit of claim 2, further comprising an oscillator connected to the power supply-adapting module.

6. (Previously Presented) The control unit of claim 2, comprising a memory configured to store characteristics of the relay.

7. (Currently Amended) An electronic circuit comprising:
at least one pulse duration modulator;
a calculator for changing a cyclic ratio value of the at least one pulse duration modulator for supplying a contacting voltage or a maintaining voltage;
a control-command unit, the at least one pulse duration modulator controlled by the control-command unit, wherein the control-command unit is programmed for modulating a power supply of at least one electromagnetic relay;
wherein the control-command unit modulates the power supply according to:
at least one of a voltage supply and a current supply; ~~the control-command unit configured to provide the contacting voltage, the contacting voltage sufficient to close the contact of the relay, and according to at least one of the voltage supply and the current supply to provide the maintaining voltage, the maintaining voltage sufficient to maintain this closure. and~~
the contacting voltage which is sufficient to close a contact of the relay;
wherein the control-command unit modulates the power supply according to:
at least one of the voltage supply and the current supply and
the maintaining voltage which is sufficient to maintain closure of the contact;
wherein the control-command unit is configured to provide the contacting voltage sufficient to close the electromagnetic relay and the maintaining voltage sufficient to maintain the closure of the contact;

8. (Previously Presented) The circuit of claim 7, further comprising a micro power cut detector circuit configured to detect micro power cuts.

9. (Previously Presented) The circuit of claim 8, wherein the micro power cut detector circuit, upon detection of a micro power cut, controls the voltage provided to the relay.